



## Mead Starter Guide

- We normally use 2-3lbs of honey per gallon of must (you can use more honey for sweeter and/or higher alcohol mead)
- Warm up half of your water on the stove top...about 100 degrees F will do; add yeast nutrient.
- Remove pot from heat and stir in honey.
- When honey is dissolved pour into your fermenter and top up to desired batch size with cold water
- **Aerate:** In a sealed bucket or in the fermenting container with a lid, shake vigorously for a minute or two. If using a small fermentor where there will be little head room it's best to aerate before topping with water. The first aeration is the most important for building a healthy yeast population. Aeration can also be done with a sanitized wire whisk or large spoon and there are several aeration tools on the market.
- **Pitch yeast:** There are a variety of dry and liquid yeasts from which to select, depending on if you want your mead dry, semi-sweet or sweet.
- **Add Yeast nutrient as indicated below**
- Cover fermentor and add an airlock...fill airlock with sanitizer or cheap vodka.
- For a healthy fermentation aerate once or twice daily for the first 3-5 days of fermentation or until approximately 1/3 of the sugar has been fermented out (this is called the 1/3 sugar break) IE; OG of 1.090 drops to 1.060. The first aeration is the most important for building a healthy yeast population. Aeration can also be done with a sanitized wire whisk and there are several aeration tools on the market.
  - **De-gas:** Degassing your must is an important step to take before full aeration after your fermentation has begun. As the yeast produce CO<sub>2</sub> it will become dissolved into the must, we know this as carbonation. If you go full bore on aeration with this dissolved CO<sub>2</sub> you'll likely end up with a mess.
- **Yeast Nutrient:** Honey must is mostly devoid of the nutrients that brewing yeast needs. It is best to add yeast nutrients in stages at the beginning of the fermentation process. This will ensure healthy yeast population and a vigorous ferment.
  - Use 1/2 tsp per gallon of must of a nutrient blend such as Fermaid K or Wyeast Beer/Wine Nutrient Is a good starting point.
  - DAP (Diammonium phosphate) is also a very important nutrient addition, use 1/2 tsp per gallon of must.
  - Add 1/3 of nutrient blend and 1/2 of DAP dose along with the yeast or when aerating. Add another 1/3 of the nutrient and remaining 1/2 of the DAP once fermentation has started or about 12-24 hours or so after pitching yeast as a good rule. The final addition is added at the 1/3 sugar break. To simplify things you can do this on day 3 or 4 with your final round of aeration.
  - DO NOT add nutrient dry. It's best to dissolve your nutrient in a small amount of must before adding back to the fermenter. If you add in dry it will cause nucleation of CO<sub>2</sub> in your must and risks foaming over. If you have properly degassed your must you are less likely to have any issues with this.
- **Fermentation:** Ideal temperature is 60F, but ale temps 68-72 are ok too, benefiting from some aging time after to smooth out the harsh that will have been produced. The fermentation time will depend on how much honey you used, the variety of yeast you select, yeast population and pitching rate and finally fermentation temperature. Normally, mead will ferment out in 2-4 weeks. Small meads or Hydromel will ferment quicker. Once fermentation is complete you then move it to a secondary to ensure fermentation is complete and to further clarify. Once crystal clear you can bottle and drink, but for better results some aging will be beneficial.
- **Taste it!** Some folks like to add acid blend to give their meads a "brighter" flavor. Others prefer the natural flavor of unadulterated mead. You can always try adding a touch of acid blend to a small quantity of your mead and taste it to see if you like the flavor...you be the judge.
- **Aging:** There is much controversy over how long mead should be or needs to be aged. Some drink their meads immediately after fermentation is complete. Some folks believe aging helps to soften and meld the flavors. Again, be your own judge...go with what you like! As a general rule, sweeter meads will be ready faster than dry meads as the residual sugars will help to cover up some of the harsher tones. Whereas a dry mead will present more and complex flavor compounds.
- **Water:** If your tap water tastes good it's fine to use for mead. If it tastes like chlorine it's best to find a better source or try to drive as much of that out as possible. Allowing your water to sit out loosely covered for 12-48 hours will significantly reduce the amount of chlorine in your water. Again, taste is key, here. Filtered or spring water is an excellent option. Do not use plain deionized water (RO or Reverse Osmosis) and it's generally not good to use well water as you can end up with a metallic taste in the finished mead, this is also true for beer and wine. (For a future update on this I will include some mineral additions).

## Back Sweetening Your Mead

If your mead is too dry or tart, you can always back sweeten it, as follows:

- Crush and add one Campden tablet per gallon to the mead (1/16<sup>th</sup> tsp granulated), stirring carefully, but thoroughly.
- Heat 1 cup of water to about 140 degrees and stir in potassium sorbate (also known as Sorbistat K) at 1/2 teaspoon per gallon of mead; add hot solution directly to mead.
- You can now use honey, sugar, syrup, fruit, etc. to sweeten the mead without fear of it fermenting any further
  - Stir sweetener in slowly to avoid aerating the mead (sloshing and aerating the mead will oxidize it, giving it “off” flavors)
  - We recommend you add a little of the sweetener at a time and let stand overnight, then taste...repeat if it's still not sweet enough...you can always add sweetness, but you can't take it away, so you want to avoid over sweetening.
  - SG readings of .990-1.010 for dry, 1.010-1.020 for semi sweet, 1.020+ for sweet
- Now you can bottle, keg or otherwise store your mead to age it as you like...or just drink it!

### Types of mead:

- Melomel – Mead made with fruit.
- Pymment - Grape Melomel
- Cyser – Apple Melomel usually in the form of cider in place of water.
- Metheglin - Mead made herbs and/or spices.
- Hydromel – Light small mead, usually under 7 or 8% alcohol
- Acerglyn – Mead made using real maple syrup.
- Braggot (modern) – Mead brewed with the addition of grain malt.

**Adding fruit to mead:** Fruit can be added in either primary or secondary fermentation. The easiest is the put into primary. Adding to secondary will retain some more of the fresh fruit character that would otherwise be blow off during primary fermentation. However, it will take a bit longer to clarify and for all of the flavors to meld together. Fruit in primary will tend to settle out better than in secondary minimizing loss.

I recommend using a fermenter with a fair bit of headspace compared to batch size. This facilitates easy and less messy aeration.

2-5 pounds of fruit per gallon is the general range...more for the more delicately flavored fruit such as mellons, peaches and strawberries. Less should be used if making dry mead, and also keep the alcohol content at or below 10% to reduce harshness in the finished mead.

If using whole fruit mash well before adding do the fermentor, DO NOT puree. Pureeing will break up the seeds and can add undesirable tannins to the mead.

Frozen fruit from your local supermarket is a good option as they are already clean.

If using fresh and/or wild fruit it should be frozen to breakdown the cell walls, mash and add to must. You will also want to sulfite this to prevent any odd bacteria from spoiling your mead. One campden tablet or 1/16<sup>th</sup> tsp granulated Potassium Metabisulfite per gallon of must. If fruit is going into the secondary you should do this with the mashed fruit in a separate container, sulfite 1 Tab or 1/16<sup>th</sup> tsp per gallon of mashed fruit.

Resources:

[www.gotmead.com](http://www.gotmead.com) is my number one resource. It's the largest website dedicated to all things mead. There are excellent Mazers (mead brewers) that have lots of experience and knowledge to help you brew the best mead. There is a “recipe calculator” that can help you make you mead how you want it, focusing on ABV/gravity calculations. Also very good for calculating how much honey or sugar you need to back-sweeten to reach a particular gravity level.

*The Complete Mead Maker* – Ken Schramm – ISBN-13:978-0-937381-80-9. Excellent book